Intelligence Support for Military Operations By MARKUS V. GARLAUSKAS Refueling U-2. Iraqi Freedom.

1st Combat Camera Squadron (Matthew Hannen)

oint operations will demand an unprecedented level of intelligence support in the future. Like other aspects of jointness, this asset will not only require improvement but transformation. Moreover, it will require more than keeping ahead of potential enemies. If the obstructive patterns found in the system are not overcome, the gap between needs and

capabilities could compromise the ability of the joint force to successfully conduct a full range of operations.

Statements by various proponents of intelligence support have created great expectations. The Quadrennial Defense Review (QDR) identified exploiting intelligence advantages as one of the four pillars of military transformation. Senior leaders and defense specialists anticipate that commanders will be able to receive markedly faster and more detailed intelligence on a situation, which is known as information

Markus V. Garlauskas is an intelligence specialist with the Department of the Army assigned to Combined Forces Command/U.S. Forces Korea.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 2003	2 DEDORT TYPE			3. DATES COVERED 00-00-2002 to 00-00-2003		
4. TITLE AND SUBTITLE Intelligence Support for Military Operations				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National Defense University,Institute for National Strategic Studies,260 5th Avenue SW Fort Lesley J. McNair,Washington,DC,20319				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAII Approved for publ	LABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	7	REST ONSIBEE LEASON	

Report Documentation Page

Form Approved OMB No. 0704-0188



superiority. *Joint Vision 2020* states that information superiority is fundamental to achieving the necessary capabilities. Thus it is vital to examine the challenges to making that vision a reality.

The Armed Forces must assume a central role in transforming intelligence. An increased reliance on national intelligence agencies has denied control to commanders and limited input by fielded forces. Those leaders

a heavy reliance on national agency support will hamper the command and control of supported commanders

responsible for transformation must establish realistic expectations for future support based on the resources provided. In the past, military expectations have been exaggerated given the means at hand, setting the stage for failure. Moreover, transformation must create an anticipatory support system, which is prepared both geographically and functionally for various missions. Intelligence often does not adequately support military operations other than war or deployments to unexpected environments. Finally, institutional inertia must be overcome. The necessary changes can be made, but time is running out. Transformation is continuing, and expectations for support are increasing daily.

The Military Role

Some regard transforming intelligence as synonymous with military transformation, with the same dynamics, goals, and characteristics. Because of this mistaken belief, many proponents of military transformation ex-

pect the intelligence community to lead the way in the evolution of intelligence support. As Admiral William Owens, USN (Ret.), a former Vice Chairman, viewed the situation,

"The U.S. intelligence community must either seek to lead and promote the on-going transformation of the military or bear much of the responsibility for a U.S. failure to seize the opportunities provided by our lead in military technologies."

This approach must change or the Armed Forces may be left without intelligence support to meet their needs. National intelligence agencies—which are neither commands nor part of the military intelligence apparatus—have various customers, interests, and priorities beyond direct support to joint operations. In addition, as the National Reconnaissance Office has reported,

"[A support] system designed by intelligence experts, rather than military operators, would most likely be based on the information that can be provided, and it could be ignorant of what information is actually needed for operational decisionmaking."²

Since the Cold War, commands have sought intelligence from outside their organizations to an unprecedented degree. Intelligence staffs on the tactical level derive limited benefit from intelligence that originates in higher headquarters because senior-level staffs increasingly turn to agencies on the national level to meet the demands of their commanders.

This change was accelerated by the Persian Gulf War. The massive requirements of the air campaign led U.S. Central Command (CENTCOM) to depend on the national agencies for an unparalleled level of support. National agencies offered considerable intelligence resources, but the results were less than satisfactory. That experience may have led the services to invest more in intelligence capabilities, but budget constraints produced the opposite result.

As the Cold War ended, national intelligence agencies demonstrated their capability and willingness to increase the emphasis on support to military operations as they sought post-Soviet missions to protect budgets. Military leaders were meanwhile looking for ways to cut spending in order to minimize the impact on force structure and combat power. Expecting increased support from the intelligence community to mitigate any shortfalls, the services drastically cut intelligence assets. The intelligence community, with the support of the President, made supporting military operations its top priority in response.

Despite budgetary benefits, this arrangement will present problems for the joint force if it continues. First, painful resource conflicts between commanders and other national intelligence customers are becoming inevitable. Second, a heavy reliance on national agency support will hamper the command and control of supported



commanders, who cannot normally directly task most national resources. More generally, overreliance on national agencies will limit the desire and ability of the military to shape the response to increased intelligence support needs.

The impact of these issues was minimized when the military was the unrivaled number one customer of the national intelligence agencies. However, those days are now numbered if not over. As far back as 1996, the IC21 congressional study concluded that a heavy emphasis on support for military operations was crowding out other intelligence customers. With the global war on terrorism, many of those customers now have increased priority. National agencies will be expected to support law enforcement agencies and coalition partners hunting terrorists as well as enemy units. Similarly, national-level

support to force protection for U.S. units deployed overseas will increasingly take a back seat to warning of terrorist attacks at home. A moderately increased top line in the intelligence budget will do little to offset resource conflicts generated by realignment.

As the new priorities come into play, commanders will find that they actually exercise very limited control over national intelligence support. In the past, unified commanders have been able to use voluminous and insistent submissions of intelligence requirements and requests to national agencies to exercise de facto control over national assets. Commanders may find that the information which is expected is unavailable because applicable national resources have been devoted to other strategic priorities on short notice. Unlike the military, the national intelligence agencies do not have significant uncommitted resources for crises, so when a new requirement emerges,

resources must be quickly pulled away from other tasks.

Even if conflicting requirements only rarely lead to unexpected drops in national agency support, a similar problem arises from the inability of commanders to fully control that support. According to joint doctrine, commanders are expected to coordinate and control support. While national agencies are central to the intelligence effort, it is difficult to achieve such control in practice. During the air campaign in Yugoslavia, the Supreme Allied Commander Europe, General Wesley Clark, USA, exercised no control over organizations that recommended targets for the Allied Force. When the Chinese embassy in Belgrade was attacked, Clark had to deal with the consequences. If a joint force commander does not control the conduct of intelligence support, how can he

control operations? Obviously this issue must be addressed and better arrangements must be worked out even if military dependence on national agency support is reduced.

Transformation leaders cannot expect exponential increases in responsive and effective intelligence support while leaving it solely to the national intelligence community. If the joint force of the future needs more operational intelligence support, it must be paid for out of service budgets. More capable military intelligence organizations must be equal partners with national agencies, enabling them

joint forces will be expected to select, spot, identify, track, and strike targets that will achieve decisive effects

to better represent their interests in transforming intelligence community capabilities. This may lead the Armed Forces to exercise more control over some national resources as necessary. Military leaders must show that they are equal to this challenge by paying careful attention to the intelligence aspects of transformation.

Expectations

Intelligence failures draw popular attention. What goes unsaid, however, is that flawed expectations can lead to failure. If expectations are unclear, or unachievable based on available resources, military transformation will not achieve its promise, which probably will be proven on the battlefield. Identifying such a setback as an intelligence failure would be small consolation. To avert this situation, military leaders must exert a leading role in setting expectations for their intelligence support.

History has provided transformation leaders with ample warning. Each successive iteration of U.S. warfighting doctrine since World War II has held out higher expectations which were not fully met. With the heavy reliance current transformation efforts place on intelligence, the emerging generation of doctrine could be the worst example of this pattern yet.

The roots of excessive confidence in intelligence support are found in

World War II. The military opinion of intelligence improved rapidly after Pearl Harbor. The postwar lifting of secrecy brought some intelligence coups to light, including the breaking of enemy codes. Decisive victories at Midway, the Battle of the Atlantic against German U-boats, the invasion of Sicily, and even the Normandy landing were attributed to superior intelligence.

When military doctrine was revised in the 1950s, this optimistic view of intelligence would be apparent. Pentomic doctrine envisioned battlegroups dispersed to minimize their vulnerability to nuclear strikes, with the gaps

covered by improved surveillance and intelligence directing long-range fire-power. Meanwhile, doctrine shifted from retaliation against cities to rapid

strikes against hard-to-find targets, including delivery systems.

At the time new doctrine was adopted, U.S. intelligence could not meet targeting support requirements. A massive improvement program directed by President Dwight Eisenhower led to revolutionary overhead cameras, new platforms, and more photo-interpreters—but only partially solved the problem. U-2 aircraft and the Corona satellite provided some ability to find and track strategic targets inside the Soviet Union; however, no assets were deployed to meet the tactical targeting needs of Pentomic doctrine before it was abandoned years later.

Such problems were often repeated, most notably in developing AirLand Battle doctrine, which required quickly finding and selecting targets deep in enemy territory in rapidly changing situations. AirLand Battle anticipated strikes on mobile high payoff targets such as command and control vehicles. Moreover, it expected highly accurate bomb damage assessment (BDA) to allow rapid reengagement of surviving targets without wasting deep strike capabilities.

The intelligence capabilities required were not in place, and unlike in the 1950s there was no crash program to develop them. It was almost a

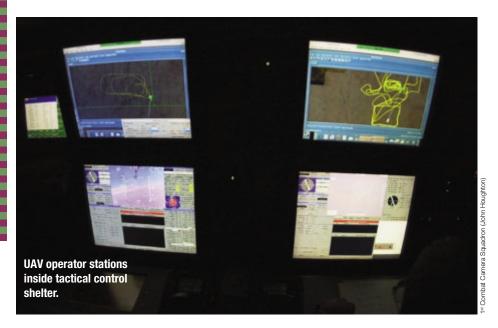
decade after the adoption of AirLand Battle before assets such as the joint surveillance target attack radar system (JSTARS) aircraft made it possible to monitor movements deep behind enemy lines in near-real time. But improvements in technical collection did not solve every problem, as Desert Storm showed.

The comments of senior leaders during the Gulf War illustrated the level of expectations. General Norman Schwarzkopf, USA, and General Charles Horner, USAF, admitted that success would not have been possible without unprecedented intelligence support. But in virtually the next breath they said that expectations were not met in key areas. Horner, who directed air operations, lambasted poor intelligence support for targeting. Similarly, Schwarzkopf testified before Congress that the BDA system was abysmal.

Desert Storm revealed that effectively tracking key mobile targets, a major component of AirLand Battle, was a remote goal. After launching hundreds of missions against mobile Scud launchers, it is still impossible to confirm if any were destroyed. Years later, during the NATO bombing of Kosovo, U.S. forces still did not receive support to consistently identify and strike mobile targets from the air, while indications from Afghanistan are that the problem has yet to be fully resolved.

High expectations for intelligence to support targeting and BDA has continued with the focus on precision engagement in *Joint Vision 2020*. Joint forces of the future will be expected to select, spot, identify, track, and strike targets that will achieve decisive effects, assess the results, and then quickly reacquire and reengage surviving targets as necessary. Further, the joint force is expected to accomplish these tasks with overwhelming speed and throughout a full range of military operations—while minimizing collateral damage and fratricide.

The main condition to achieving this vision of precision engagement is intelligence. The Armed Forces have developed and proven the capability to strike targets rapidly, once identified. However, experience with precision strikes in the Persian Gulf, Kosovo, and



Afghanistan have demonstrated that the joint force can hit targets more consistently and quickly than it can identify and select targets. Poor BDA has also meant that no one knows what was really accomplished in a given strike for months if ever. In short, doctrine is ahead of intelligence support again.

It will require tempered expectations and increased capabilities to bring the two factors into closer alignment. If the military allocates sufficient resources and attention, intelligence capabilities may be able to realize the expectations of *Joint Vision 2020* by the appointed year. However, in the intervening years, doctrine must reflect—and commanders must estimate—goals for intelligence support.

Transformation leaders must also be specific in communicating their vision of the future. This will mean assessing intelligence support needs for various contingencies in doctrinal terms rather than in terms of the technological capabilities available for exploitation. Without precise guidance on future needs, the national intelligence agencies will choose to build capabilities based on their priorities, while military organizations will not be able to optimize structures, doctrines, and training programs to best accomplish their missions.

Anticipatory Support

The Armed Forces have made great strides in the physical ability to rapidly project power over vast distances as well as deploy and sustain forces in areas with little preexisting infrastructure. They have made far less progress toward rapidly meeting intelligence support needs for operations in all but the highest priority locations and missions. To address this problem, the Armed Forces must build a system that anticipates and prepares for, not reacts to, the challenges of an increasingly diverse threat.

Since World War II, U.S. forces have been frequently deployed to places regarded as low intelligence priorities until the outbreak of a crisis, which has meant that intelligence organizations were unprepared to provide support. Similarly, the intelligence support system has had problems meeting the unique demands of missions other than the full-scale traditional warfare for which it was designed. These shortcomings have become obvious in non-war military operations in various parts of the world since the Cold War.

Both the breadth and flexibility of U.S. intelligence is currently limited. The increasing cost of collection platforms results in fewer entering the inventory. It is impossible to adequately cover every location where forces may be deployed. Therefore, increasing coverage in a crisis leads to sacrificing attention elsewhere and possibly missing warnings of other crises.

As with platforms, there are fewer people to go around than before budgetary cuts began. More importantly, analysts are not universally interchangeable between regions and specialties. Specialized expertise on deployment areas or the surrounding regions is vital for good collection and analysis. This knowledge has normally been in short supply when unexpected events cause forces to be deployed because most intelligence personnel have been trained and conditioned to deal with just a few longstanding threats.

When North Korea invaded the South in 1950, the U.S. intelligence system was unprepared to meet the human requirements for operations on the peninsula because it had been focused on Europe. A study of lessons learned during the Korean War revealed a critical shortage of trained linguists in the Army.³ The National Security Agency (NSA), which provides signal intelligence to the military, had only one analyst tasked to cover Korean message traffic and only one trained Korean linguist at the outbreak of the conflict.

Forty years later, little had changed. When Iraq invaded Kuwait in 1990, DIA had only one analyst assigned to Iraq fulltime. When forces were deployed to Somalia the following year, CIA had to send case officers who did not speak the language and had little knowledge of Somali history or the clans which ran the country. Military intelligence units were so short of trained personnel that they relied on Somali civilians as interpreters, some of whose backgrounds tainted the resulting intelligence.

Even after troops are deployed and an area becomes an intelligence priority, experience demonstrates that it can take a long time to overcome a lack of advance preparation. Intelligence organizations will quickly assign collectors and analysts, but recruiting and training area experts and linguists can require years, and building an effective human intelligence (HUMINT)

network calls for patience and persistence. Cultivating, placing, and evaluating the reliability of human sources is best done over a long period. Rushing the process to support operations which are underway can compromise effectiveness, as became clear in Somalia. Among other issues, HUMINT support for Task Force Ranger led to hitting the wrong targets several times, including a pro-U.N. Somali general.

Reliance on HUMINT in Somalia also illustrated that various types of operations call for different requirements and present unique challenges. Such missions can be best addressed with methods, structures, and equipment optimized for the task at hand. For example, requirements in Somalia could only be effectively met by human agents, leading the U.S. military to depend on comparatively weak HUMINT capabilities. In other situations, such as large-scale conventional wars, electronic sensors might be more useful.

intelligence transformation has focused largely on using new technologies to gather and distribute raw information

The full spectrum dominance invoked by JV 2020 means the intelligence system must be able to support any type of operations on short notice. But the system is trained and organized today to support large-scale conventional warfare and can only be temporarily or marginally modified to support other missions. The Armed Forces are beginning to make significant changes, such as the increased **HUMINT** capabilities of the Stryker brigade combat team within the Army. Further progress will require broader training and more flexible organizations, as well as units that can support particular missions and be ready for attachment to deploying forces.

Moreover, the joint force must lay the intelligence groundwork for supporting operations in areas that may not be priorities today. In many places where the military will be deployed, and some where they are currently deployed, there are insufficient HUMINT and other specific resources. A relatively small long-term investment in recruiting and training area specialists and better monitoring lower-priority areas may provide substantially improved support when the time comes to deploy on short notice. By careful analysis, areas that may become crisis spots can be identified to receive greater attention with enough lead time to put the groundwork in place.

There will be resistance to this anticipatory approach. It would take resources from other concerns and training from conventional warfighting support. In addition, most of the assets would come from the military. The national agencies are focused on current requirements and cannot dedicate more than a token effort to areas that might only potentially be critical to military customers.

Despite the expense, if a predictive approach is not pursued, joint forces will find it difficult to achieve information superiority in the future. Local and regional threats have a sig-

nificant home ground advantage that has historically overcome the U.S. intelligence advantages alluded to in the QDR report. Transformation leaders cannot

afford to concede information superiority to an enemy at the outbreak of a crisis because of reluctance to pay the costs of better preparing for a wide variety of contingencies.

Overcoming Inertia

In meeting these challenges, transformation leaders will encounter cultural, budgetary, and organizational inertia. Many patterns must be changed to achieve transformational advances in intelligence support of military operations. Some have already been considered, while others may only have a minimal impact on transformation. Yet two problems require special attention: the preference for high-tech collection and communication over other forms of intelligence and the relatively low priority intelligence is assigned within the military.

It has long been part of the intelligence culture to prize collection over analysis, and technical means of collection in particular have dominated budgets. Similarly, the defense establishment has a strong tendency to equate fielding advanced technology with transformation. As a result, intelligence transformation has focused largely on using new technologies to gather and distribute a flood of raw information, which the United States already does fairly well.

Leaders insist that the intelligence focus is moving toward more personnel and analysis, but technology and collection still receive most of the funds—along with the power and prestige. Of nine programs cited as key transformation initiatives by the Transformation Study Report in 2001, only the Army distributed common ground system was not a technical sensor or platform. Designed to improve intelligence processing, analysis, and dissemination, this system was only assigned as a C list priority.⁴

When combined with the traditionally secondary status of intelligence in the military, this bias can have damaging effects on transformation. One has been the funding and attention devoted to enhancing sensor-to-shooter links, such as connecting fighter pilots with real-time imagery from platforms. This approach to the transformation of the targeting process wastes limited resources and is partially driven by the desire of shooters to limit reliance on intelligence personnel.

Shooters already have sensors, and providing more raw unanalyzed sensor data will solve few of their problems. Linking warfighters directly to additional sensor information means little without the analytical capability to accurately determine what the sensors are actually looking at. Trained imagery analysts who had ample time were deceived in Iraq, Kosovo, and Afghanistan, and shooters under immediate threat will be far less effective analysts. Worse, the transmission of all this data will place huge and unnecessary demands on overburdened communications networks, not to mention the attention of the shooter.

It would be more useful to focus technological resources on helping those personnel who now see sensor



data to identify targets more accurately. Substantially more effective automatic target recognition software and hardware would enhance data exploitation from existing sensors and platforms, improving intelligence application across the board. At the same time, more effort should be devoted to improving analyst-shooter links for warfighters to get valuable finished intelligence more quickly.

Even when technology connects shooters with virtual or human imagery analysts to help identify targets in real time, sensor-to-shooter links do not resolve the targeting support problem. Effective targeting in an age of precision warfare is more complicated than simply finding things that belong to an enemy and designating them for attack. U.S. precision strike capabilities are finite and must be directed at the most important targets to be decisive. As *Joint Vision 2020* states, "success depends on in-depth analysis to identify and locate critical nodes and targets."

Improvements in processing, analysis, and tasking—not more raw data—are the keys to achieving transformational improvements in intelligence. Billions of dollars are to be spent on more unmanned aerial vehicles, satellites, and advanced sensors,

while it is clear that intelligence organizations lack the manpower to thoroughly examine even a small fraction of the information currently collected. A more appropriate approach would redirect resources to building a system that more efficiently uses the collection capacity. That would focus tasking more tightly on areas likely to contain vital pieces of information, improve processing to speed their identification, and provide the analytical resources to interpret what they mean more reliably and completely. That would provide better intelligence without increasing the amount of information collected.

Technology may find its optimum contribution in streamlining the laborintensive task of information processing. Deploying improved automatic target recognition, electronic language translation, virtual collaboration, and data mining technologies would yield savings in manpower and time and result in greater effectiveness. Ultimately, the processing, analysis, production, and storage of intelligence can and should be far more automated.

The final transformational step would be creating a common intelligence knowledge base to allow analysts from different organizations to securely, quickly, and efficiently access all raw intelligence and finished products. Once the obstacles to sharing among agencies are overcome, this shared knowledge would help resolve many problems inherent in interagency cooperation without sacrificing organizational independence. Military intelligence could get increased value from national agency resources without contesting control. Analysts could continue to provide analysis tailored for their organizations but without having access to only part of the information collected on the subject.

Transformation will be a difficult process unless the Armed Forces accept intelligence as an equal partner of other aspects of joint operations. During successful military transformations, new relationships are formed among the various arms of each service. The current situation is no exception. A sustained effort will be required to substantially increase the level of attention and resources that intelligence receives within the military. If intelligence support is becoming more vital, it must assume an increased priority across the defense establishment. The challenge can be met-and intelligence can fulfill its promise as the foundation of military success.

NOTES

¹ William Owens, "Intelligence in the 21st Century," *American Intelligence Journal*, vol. 19, nos. 1 and 2 (Spring 1999), p. 15.

² Thomas Behling and Kenneth Mc-Gruther, "Planning Satellite Support to Military Operations," *Studies in Intelligence* (Winter 1998–99) n.p., http://www.cia.gov/csi/studies/winter98-99/art10.html.

³ 8th U.S. Army Military History Section, Intelligence and Counterintelligence Problems During the Korea Conflict, reprint of 1954 report (Washington: U.S. Army Center for Military History, 2002), p. 1.

⁴ Jim McCarthy, *Transformation Study Report: Transforming Military Operational Capabilities* (Washington: Government Printing Office, 2001), p. 57.